

Donehower, Gretchen

Working Paper

Mapping the unpaid care work economy in Asia

ADB Economics Working Paper Series, No. 777

Provided in Cooperation with:

Asian Development Bank (ADB), Manila

Suggested Citation: Donehower, Gretchen (2025) : Mapping the unpaid care work economy in Asia, ADB Economics Working Paper Series, No. 777, Asian Development Bank (ADB), Manila, <https://doi.org/10.22617/WPS250146-2>

This Version is available at:

<https://hdl.handle.net/10419/322360>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by/3.0/igo/>

APPENDIX

Mapping the Unpaid Care Work Economy in Asia

Gretchen Donehower

ADB Economics Working Paper No. 777

April 2025

DATA ANNEX

Bangladesh

The time use survey (TUS) data from Bangladesh are from the Bangladesh Pilot Time Use Survey of 2012 conducted by the Bangladesh Bureau of Statistics. The author would like to thank colleagues from the National Transfer Accounts/Counting Women's Work research team at the University of Dhaka for sharing their estimates.

Details in the survey are from

Bangladesh Bureau of Statistics. 2013. Time Use Pilot Survey 2012.
http://bbs.portal.gov.bd/sites/default/files/files/bbs.portal.gov.bd/page/96220c5a_5763_4628_94_94_950862accd8c/TUSReport2012.pdf.

This survey is a 24-hour diary survey coded using the 2003 version of the International Classification of Activities for Time Use Statistics. The full coding scheme is available in Annex 21 of the Guide to Producing Statistics on Time Use: Measuring Paid and Unpaid Work (United Nations Department of Social and Economic Affairs 2005), which can be accessed at United Nations. https://unstats.un.org/unsd/publication/seriesf/seriesf_93e.pdf.

Codes (from survey dataset variable "act5") are included in the following activity groups:

- (i) market work: 1111–5900;
- (ii) indirect care (general housework): 6111–6900;
- (iii) direct care for household children: 7111, 7112, 7113, 7114;
- (iv) direct care for household adults: 7121, 7122, 7123;
- (v) direct care for household others (includes age not specified): 7200, 7900;
- (vi) direct care, volunteering: 8000–8999, except 8116 and 8117;
- (vii) direct care for non-household children: 8116; and
- (viii) direct care for non-household adults: 8117.

India

The TUS data are from India's Pilot Time Use Survey conducted by the Ministry of Statistics and Programme Implementation in 1998–1999. It includes data from six states (Haryana, Madhya Pradesh, Gujarat, Orissa, Tamil Nadu, and Meghalaya). The author would like to thank colleagues in the National Transfer Accounts/Counting Women's Work research team at the International Institute for Population Sciences for sharing their estimates.

The details of the survey are from

https://www.mospi.gov.in/sites/default/files/publication_reports/Report%20of%20the%20Time%20Use%20Survey-Final.pdf

This survey is a 24-hour time diary survey that is coded using a scheme developed for the survey.

The codes (from the survey documentation) are contained in the following activity groups:

- (i) market work: 111–329, 892;
- (ii) indirect care (general housework): 411, 421, 431, 441, 461, 471, 481, 491;
- (iii) direct care for household children: 511, 521, 531, 561, 571;
- (iv) direct care for household adults: 541, 551, 562, 572;
- (v) direct care for household others (includes age not specified): 591;

- (vi) direct care, volunteering: 611–691;
- (vii) direct care for non-household children: not available;
- (viii) direct care for non-household adults: not available; and
- (ix) direct care for non-household members: 581.

As the codes for non-household children and adults were not available separately, they were grouped into a single set of activities, and their consumption was distributed proportionally to the age profiles of the household adults and children.

Mongolia

The TUS data from Mongolia come from the Mongolian Time Use Survey of 2015, conducted by the National Statistical Office of Mongolia.

Data are freely available online, and the data and details of the survey are from National Statistical Office. Statistical Microdata. <http://web.nso.mn/nada/index.php/catalog/108>.

This survey is a 24-hour time diary survey coded using an early version of the International Classification of Activities for Time Use Statistics (ICATUS). While the ICATUS has been updated since Mongolia began conducting TUS, they continued to use this version. A report on an earlier survey with the codes used in this survey, and the 2015 version can be found at Mongolia Statistics and United Nations Development Programme. 2000. A Pilot Time Use Survey. <https://unstats.un.org/unsd/demographic/sconcerns/tuse/Country/Mongolia/sourcemng2000.pdf>. Codes (from variable “activity_code”) are included in the following in activity groups:

- (i) market work: 0–199;
- (ii) indirect care (general housework): 211–299;
- (iii) direct care for household children: 311–319;
- (iv) direct Care for household adults: 321–339;
- (v) direct care for household others (mainly travel related to care): 380, 390;
- (vi) direct care, volunteering: 411–499, except 416 and 417;
- (vii) direct care for non-household children: 416; and
- (viii) direct care for non-household adults: 417.

Republic of Korea

TUS data from the Republic of Korea are from the 2014 Korean Time Use Survey conducted by Statistics Korea. The author would like to thank Bongoh Kye, professor of Sociology at Kookmin University, for applying the National Time Transfer Accounts methodology to Korean data and for sharing his estimates.

Details in the survey are from Statistics Korea.

<http://kostat.go.kr/portal/eng/pressReleases/11/6/index.board?bmode=read&aSeq=347182&pageNo=&rowNum=10&amSeq=&sTarget=&sTxt=>.

This survey is a 24-hour time diary survey. The following variables are used for each activity group:

- (x) market work: B110, B120, B130, B140, B150;
- (xi) indirect care (general housework): D320, D340, D360, D220, D240, D120, D140, D160, D420, D440, D520, D640, D920, D940, D960, D990, D620, H420, H520,

- H540, H720, D720, D740, D760, D780, D790, D180, D280, D460, D480, D540, D660;
- (xii) direct care for household children: E120, E140, E160, E180, E190, E220, E240, E260, E290;
- (xiii) direct care for household adults: E320, E390, E420, E490, E520, E590;
- (xiv) direct care for household others (includes age not specified): not available;
- (xv) direct care, volunteering: E720, E790, F220, F240, F260, F290, F320, F340, F360, F390;
- (xvi) direct care for non-household children: Not available;
- (xvii) direct care for non-household adults: E620, E690; and
- (xviii) direct care for non-household members: not available.

Thailand

The TUS data from Thailand are from the Thailand Time Use Survey of 2014 conducted by the National Statistical Office of Thailand.

The details of the survey are from

https://www.nso.go.th/nsoweb/nso/survey_detail/iT?set_lang=en

This survey is a 24-hour time diary survey coded using an adapted version of the 1997 International Classification of Activities for Time Use Statistics, which is very similar to the version used in Bangladesh. The full coding scheme is available in Annex 21 of the Guide to Producing Statistics on Time Use: Measuring Paid and Unpaid Work (United Nations Department of Social and Economic Affairs 2005), which can be accessed at

<https://www.un.org/development/desa/capacity-development/tools/tool/guide-to-producing-statistics-on-time-use-measuring-paid-and-unpaid-work/>.

Codes (from survey dataset variable "ICATUS_A") are included in the following activity groups:

- (i) market work: gen paidwk= 1111–5999;
- (ii) indirect care (general housework): hwk= 6000–6999;
- (iii) direct care for household children: 7111, 7112, 7113, 7114;
- (iv) direct Care for household adults: 7121, 7122, 7123;
- (v) direct care for household others (includes age not specified): 7200, 7900;
- (vi) direct care, volunteering: 8000-8999, except 8116 and 8117;
- (vii) direct care for non-household children: 8116; and
- (viii) direct care for non-household adults: 8117.

Türkiye

The completed estimates for Türkiye are included, courtesy of the National Transfer Accounts/Counting Women's Work research team, and were calculated using the same methodology. The details are in the Counting Women's Work project website at www.countingwomenswork.org.

Viet Nam

The completed estimates for Viet Nam are included, courtesy of the National Transfer Accounts/Counting Women's Work research team, and were calculated using the same methodology. The details are in the Counting Women's Work project website at www.countingwomenswork.org.

UPDATED DATA

Since the publication of the original paper, two countries have published microdata that allow the original estimates to be updated to more recent years. India conducted a time use survey in 2019, a full decade after the 1999 results cited in the paper. Mongolia also has time use survey data from 2019, which is an update of the 2015 data cited in the paper. The surveys are described here, followed by a discussion of how the results have changed between the original data in the paper and the more recent update.

India

The TUS data from India are from the nationally representative Time Use Survey of India, 2019, conducted by the Ministry of Statistics and Programme Implementation. Only a few hard-to-survey areas were left out.

Data are available online and data and details in the survey are from Ministry of Statistics & Programme Implementation. Time Use Survey (TUS), January 2019–December 2019. <https://microdata.gov.in/nada43/index.php/catalog/170>.

This survey is a 24-hour diary survey in which time data are collected from household members aged 6 and older. The activities are coded using the 2016 International Classification of Activities for Time Use Statistics (ICATUS).

Mongolia

The TUS data from Mongolia comes from the 2019 Mongolian Time Use Survey conducted by the National Statistical Office of Mongolia. In Mongolia, updated time use surveys must be conducted every four years.

Data are available online and data and details in the survey are from National Statistics Office. Statistical Microdata: Mongolia – TUS 2019. <http://web.nso.mn/nada/index.php/catalog/124>.

This survey is a 24-hour diary survey with time data collected from a representative sample of people aged 12 and older. The activities are coded using the 2016 International Classification of Activities for Time Use Statistics (ICATUS).

Activity Codes

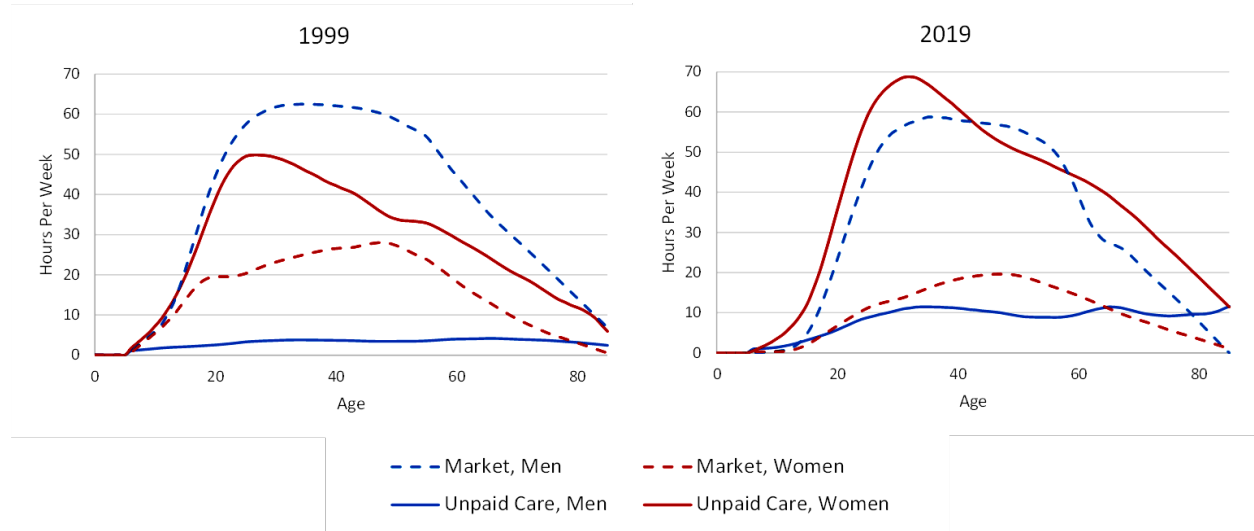
The codes are included below in activity groups for both countries following the 2016 ICATUS:

- (ix) market work: 0–199
- (x) indirect care (general housework): 301–399
- (xi) direct care for household children: 411–419, 442
- (xii) direct care for household adults: 421–439, 443
- (xiii) direct care for household others: 441, 490
- (xiv) direct care, volunteering: 511, 512, 515, 519, 522, 523, 524, 529
- (xv) direct care for non-household children: 513
- (xvi) direct care for non-household adults: 514

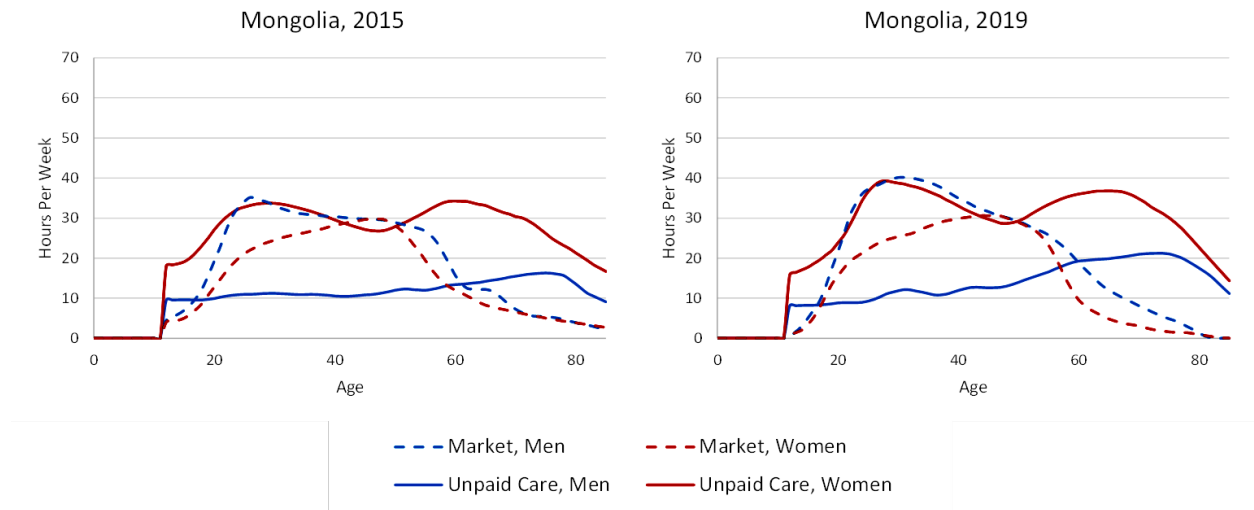
RESULTS

Figure A1: Time Spent on Market Work and Unpaid Care Work by Sex (hours per week)

a. India



b. Mongolia



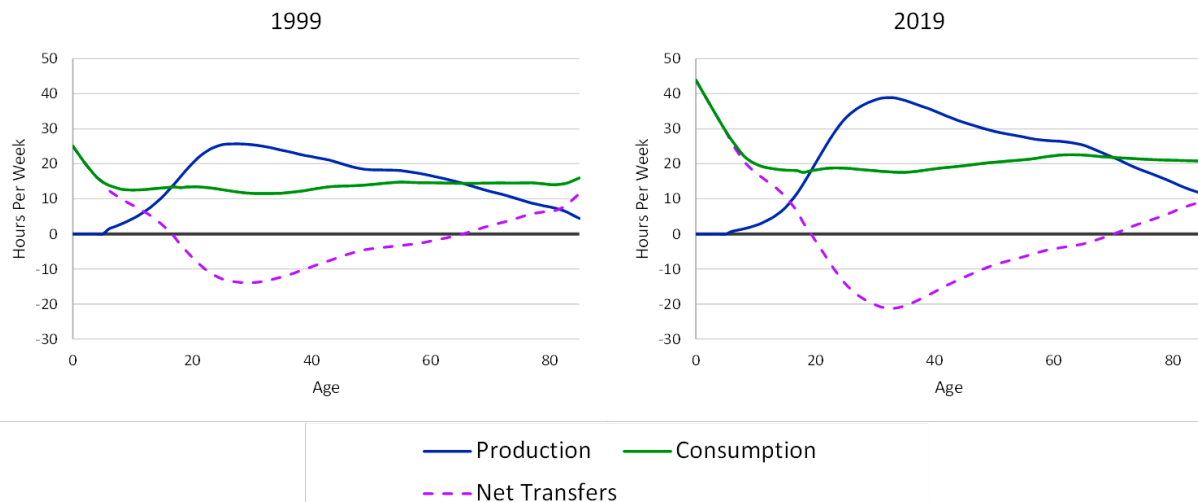
In the 20 years since the earlier Indian survey, the time women spend on market work has declined somewhat, while the time they spend on unpaid care work has increased significantly. Despite the increase in time spent by men on unpaid care work, the 2019 picture shows an even greater degree of gender-based segregation of productive time than in 1999. However, it should be noted that the 1999 survey was a pilot survey with less geographic coverage compared to the 2019 survey, so the comparison takes into account changes other than just the passage of time.

Mongolia's results look broadly similar when comparing 2015 and 2019, which makes sense as the time between surveys is shorter. Women's unpaid care work time until 2019 still retains the distinctive "M" shape observed in 2015. Younger men have spent increased market work time,

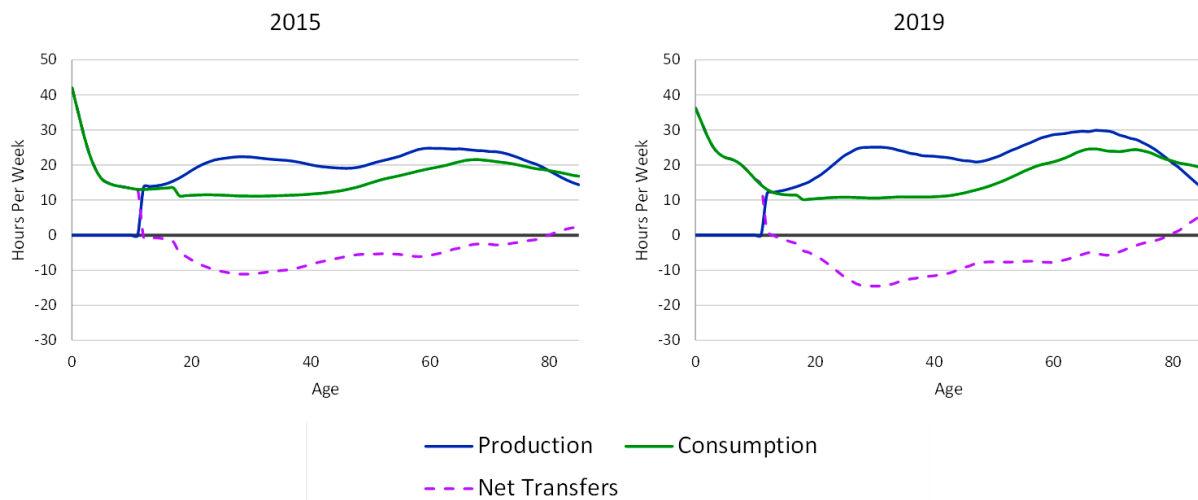
younger women have spent increased unpaid care work time. Both older men and women have done more unpaid care work time.

Figure A2: Production, Consumption, and Net Transfers of Unpaid Care by Age (hours per week)

a. India



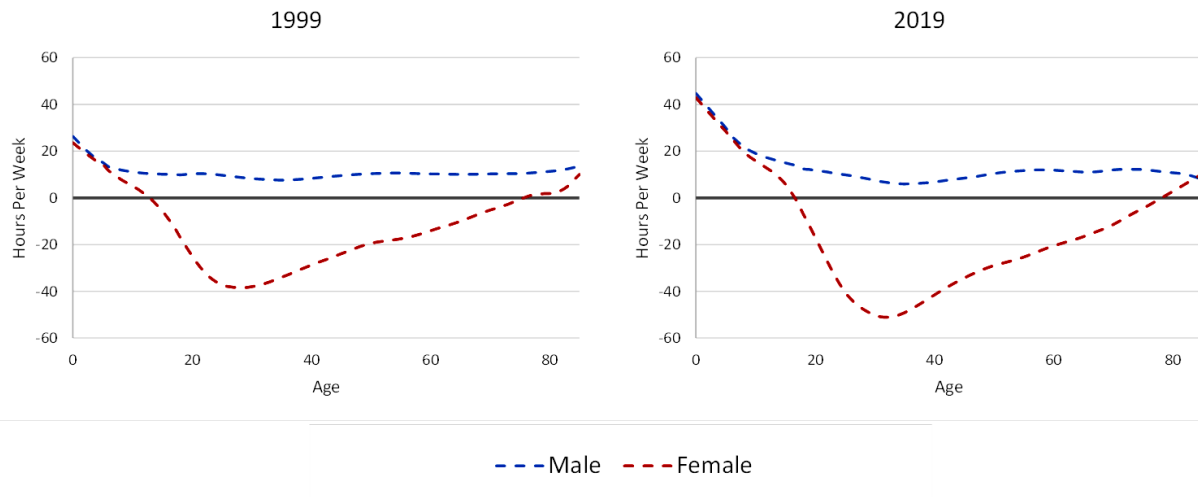
b. Mongolia



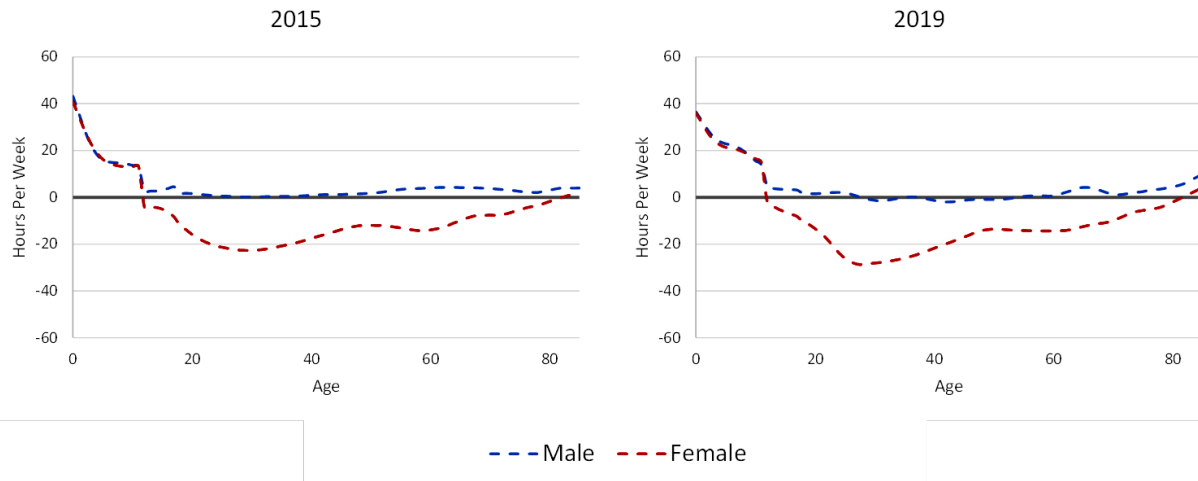
For both countries, the shapes are similar over time, but the level of unpaid care production and thus consumption has increased for India from 1999 to 2019. Further analysis would be required to determine the extent to which this is a change in geographic coverage between the surveys or a substantive change. The picture in Mongolia changes less, but in the more recent survey more unpaid care work is produced and consumed by older people.

Figure A3: Net Transfers of Unpaid Care by Age and Sex (hours per week)

a. India



b. Mongolia



In the figure for India, too, we see that the greater amount of unpaid care work performed by women leads to larger net transfers from them, which mainly go to children. Net transfers to men have not changed significantly between 1999 and 2019. The patterns in Mongolia look very similar from 2015 to 2019. In both countries, net transfers to children increase between the periods. In both countries, this could be due to lower fertility if parents spend a similar amount of time on care but divide it among fewer children. In India, there is also the baseline increase in unpaid care production by women, which also drives the increasing net transfers to young children.